

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date  
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number  
WO 2005/071481 A1

(51) International Patent Classification: G02F 1/167

(21) International Application Number: PCT/JP2005/001439

(22) International Filing Date: 26 January 2005 (26.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 2004-019056 27 January 2004 (27.01.2004) JP

(71) Applicant (for all designated States except US): CANON KABUSHIKI KAISHA [JP/JP]; 30-2, Shimomaruko 3-chome, Ohta-ku, Tokyo 146-8501 (JP).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MATSUDA, Yojiro [JP/JP]; 228-2-A201, Manpukuji, Asao-ku, Kawasaki-shi, Kanagawa 215-0004 (JP).

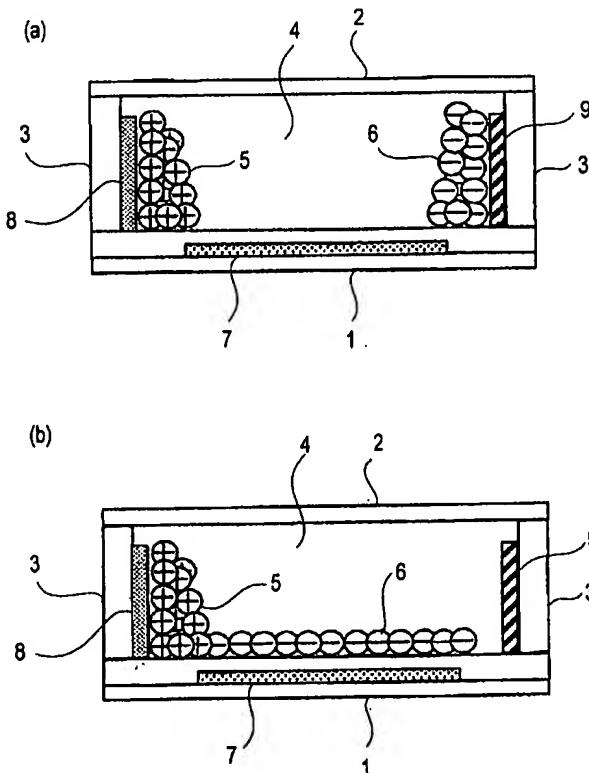
(74) Agent: YAMADA, Ryuichi; TOKO International Patent Office, Hasegawa Bldg. 4F, 7-7, Toranomon 3-chome, Minato-ku, Tokyo 105-0001 (JP).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

[Continued on next page]

(54) Title: ELECTROPHORETIC DISPLAY APPARATUS AND DRIVING METHOD THEREOF



(57) Abstract: A distribution of migration particles 5 and 6 dispersed in a closed space formed by first substrate 1 and a second substrate 2 is changed by a display electrode 7 to effect display. The migration particles 5 and 6 are migration particles of two types having different charge polarities and a substantially identical color. To the display electrode 7, a display voltage of a predetermined polarity and a display voltage of a polarity opposite to the predetermined polarity of the display voltage are alternately applied. Stable display can be effected by removing a DC component from an applied voltage.

WO 2005/071481 A1